



**FACILITY PERMIT TO OPERATE
TESORO REFINING & MARKETING CO. LLC**

SECTION H: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS
The operator shall comply with the terms and conditions set forth below:

Additions are shown as **bold** and underlined and deletions are shown as ~~strikeouts~~.

PROCESS 1		SYSTEM 5			
CRUDE DISTILLATION		NO. 51 VACUUM DISTILLATION UNIT			
		System Conditions: <u>S11.X1</u> , S13.2, S31.5, <u>S31.X1</u> , S56.1			
Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
TANK, SURGE, FEED, RPV 6955, WITH GAS BLANKET, LENGTH: 45 FT; DIAMETER: 13 FT A/N: 552808 <u>567643</u>	D35				
<u>POT, STRAINER, LIGHT GAS OIL/DIESEL, RW 7194-289.02, HEIGHT: 4 FT 6 IN; DIAMETER: 2 FT</u> A/N: <u>567643</u>	<u>DX1</u>				<u>L341.X1</u>
<u>POT, STRAINER, LIGHT GAS OIL/DIESEL, RW 7197-289.02, HEIGHT: 4 FT 6 IN; DIAMETER: 2 FT</u> A/N: <u>567643</u>	<u>DX2</u>				<u>L341.X1</u>
TOWER, VACUUM, RPV 2501 <u>RW 5967-289.01</u> , HEIGHT: 135 FT; DIAMETER: 31 FT 6 IN A/N: 552808 <u>567643</u>	D2726				<u>L341.X1</u>
<u>EJECTOR, RW 247/248, 51 VACUUM TOWER OVERHEAD, 150 PSIG STEAM, 1st STAGE, 2 IN PARALLEL</u> A/N: <u>567643</u>	<u>DX3</u>				
<u>EJECTOR, RW 249/250, 51 VACUUM TOWER OVERHEAD, 150 PSIG STEAM, 2nd STAGE, 2 IN PARALLEL</u> A/N: <u>567643</u>	<u>DX4</u>				



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<u>EJECTOR, RW 251/252, 51</u> <u>VACUUM TOWER OVERHEAD,</u> <u>150 PSIG STEAM, 3rd STAGE, 2 IN</u> <u>PARALLEL</u>	<u>DX5</u>				
A/N: 552808 567643					
KNOCK OUT POT, RPV 3240, OFF- GASES, HEIGHT: 8 FT ; DIAMETER: 2 FT	D38				
A/N: 552808 567643					
DRUM, SEAL, <u>RW 6927</u> , LENGTH: 18 FT 6 IN; DIAMETER: 6 FT	D2727				
A/N: 552808 567643					
POT, BLOWDOWN FLASH, RPV- 5550, HEIGHT: 7 FT 8 IN; DIAMETER: 4 FT	D41				
A/N: 552808 567643					
DRUM, QUENCH, RPV 5546, HEIGHT: 13 FT; DIAMETER: 5 FT	D42				
A/N: 552808 567643					
FUGITIVE EMISSIONS, MISCELLANEOUS	D2462			HAP: (10) [40CFR 63 Subpart CC, #5A, 6- 23-2003]	H23.3, <u>H23.36</u>
A/N: 552808 567643					
PROCESS 1		SYSTEM 8			
CRUDE DISTILLATION		VACUUM DISTILLATION UNIT HEATERS			
		System Conditions: S11.X1			
Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions



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HEATER, NO.51 VACUUM UNIT HEATER, BOX TYPE, NATURAL GAS, REPLACING H-401 AND H-402, WITH LOW NOX BURNER, 300 360 MMBTU/HR WITH A/N: 552828 567649 BURNER, 32 BURNERS, NATURAL GAS, JOHN ZINK, MODEL PSMR-17, WITH LOW NOX BURNER, 300 360 MMBTU/HR	D63	C1335	NOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; CO: 29.6 LBS/MMSCF NATURAL GAS [RULE 1303(b)(2) -Offset, 5-10-1996]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; PM: 6.3 LBS/MMSCF NATURAL GAS [RULE 1303(b)(2) -Offset, 5-10-1996]; VOC: 5.9 LBS/MMSCF NATURAL GAS [RULE 1303(b)(2) -Offset, 5-10-1996]; NOX: 2.62 LBS/HR NATURAL GAS (7) [RULE 2005, 6-3-2011]	A63.30, A99.X1, A195.X1, C1.X1, D29.3, D29.X1, D328.1, K67.2
PROCESS 5		SYSTEM 2			
HYDROTREATING		MID-BARREL DESULFURIZER			
		System Conditions: S11.X1 , S13.2, S15.6, S31.X1 , S56.1			
Equipment	ID No.	Connected To	RECLAIM Source Type/Monitoring Unit	Emissions and Requirements	Conditions
REACTOR, RPV 3900, HEIGHT: 27 FT 9 IN; DIAMETER: 8 FT 6 IN A/N: 553163 578248	D334				
SCRUBBER, RPV 3901, RECYCLE GAS MDEA, HEIGHT: 59 FT 6 IN; DIAMETER: 4 FT 6 IN A/N: 553163 578248	D335				



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COLUMN, STRIPPER, RPV 3902, STABILIZER SIDESTREAM, HEIGHT: 28 FT 6 IN; DIAMETER: 2 FT 6 IN A/N: 553163 578248	D336				
COLUMN, STABILIZER, RPV 3903, DIAMETER: 6 FT/9 FT, HEIGHT: 70 FT 8 IN A/N: 553163 578248	D337				
SCRUBBER, RPV 3904, STABILIZER OFF-GASES MDEA, HEIGHT: 49 FT; DIAMETER: 2 FT 6 IN A/N: 553163 578248	D338				
TANK, FLASH, RPV 3909, REACTOR EFFLUENT, HEIGHT: 20 FT; DIAMETER: 7 FT A/N: 553163 578248	D339				
VESSEL, SEPARATOR, RPV 3910, DESULFURIZER OIL-WATER, LENGTH: 10 FT; DIAMETER: 3 FT A/N: 553163 578248	D340				
ACCUMULATOR, RPV 3911, STABILIZER OVERHEAD, HEIGHT: 10 FT; DIAMETER: 4 FT A/N: 553163 578248	D341				
POT, COMPRESSOR SUCTION, RPV 3912, STABILIZER OFF-GAS, HEIGHT: 4 FT; DIAMETER: 2 FT A/N: 553163 578248	D342				
KNOCK OUT POT, RPV 3913, HYDROGEN FEED GAS, HEIGHT: 4 FT; DIAMETER: 2 FT A/N: 553163 578248	D343				
DRUM, KNOCK OUT, RPV 3915, RECYCLE GAS MDEA, HEIGHT: 7 FT; DIAMETER: 2 FT 6 IN A/N: 553163 578248	D345				



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The operator shall comply with the terms and conditions set forth below:

DRUM, KNOCK OUT, RPV 3916, STABILIZER RELEASE OFF GAS, HEIGHT: 6 FT; DIAMETER: 2 FT A/N: 553163 578248	D346				
VESSEL, SEPARATOR, RPV 3917, STABILIZER OFF-GAS, HEIGHT: 4 FT; DIAMETER: 2 FT A/N: 553163 578248	D347				
FILTER, RPV 5654, FEED S, HEIGHT: 4 FT 5 IN; DIAMETER: 2 FT 6 IN A/N: 553163 578248	D348				
FILTER, RPV 5655, FEED N, HEIGHT: 4 FT 5 IN; DIAMETER: 2 FT 6 IN A/N: 553163 578248	D349				
COMPRESSOR, RW 0033-087.32, THREE STAGE RECYCLE & MAKEUP HYDROGEN, INGERSOLL-RAND 13075 SCFM. WITH PACKED GLAND A/N: 553163 578248	D350				
COMPRESSOR, RW 0036-087.32, THREE STAGE RECYCLE & MAKEUP HYDROGEN, INGERSOLL-RAND 13075 SCFM. WITH PACKED GLAND A/N: 553163 578248	D351				
COMPRESSOR, RW 0035-087.32, OFF GAS, INGERSOLL-RAND 622 SCFM. WITH PACKED GLAND A/N: 553163 578248	D352				
COMPRESSOR, RW 0034-087.32, OFF GAS, INGERSOLL-RAND 622 SCFM. WITH PACKED GLAND A/N: 553163 578248	D353				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 553163 578248	D2483			HAP: (10) [40CFR 63 Subpart CC, #5A, 6- 20-2013]	H23.3 H23.36
PROCESS 5		SYSTEM 4			



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HYDROTREATING		No. 1 LIGHT HYDROTREATING UNIT			
		System Conditions: <u>S11.X1</u> , S13.2, S15.6, S31.1, <u>S31.X1</u> , S56.1			
Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
TANK, SURGE, RPV 0207, LENGTH: 30 FT; DIAMETER: 10 FT A/N: <u>552914 567645</u>	D401				
POT, RPV 3010, STABILIZER REBOILER CONDENSATE, HEIGHT: 2 FT 8 IN; DIAMETER: 1 FT 4 IN A/N: <u>552914 567645</u>	D402				
REACTOR, RPV 3000, NO.1, HEIGHT: 7 FT 9 IN; DIAMETER: 5 FT 6 IN A/N: <u>552914 567645</u>	D403				
REACTOR, RPV 3001, NO.2, HEIGHT: 7 FT 9 IN; DIAMETER: 5 FT 6 IN A/N: <u>552914 567645</u>	D404				
REACTOR, RPV 3002, NO.3, HEIGHT: 9 FT 9 IN; DIAMETER: 5 FT 6 IN A/N: <u>552914 567645</u>	D405				
TANK, FLASH, RPV 3007, EFFLUENT, LENGTH: 15 FT; DIAMETER: 5 FT A/N: <u>552914 567645</u>	D406			BENZENE: (10) [40CFR 61 Subpart FF, #2, 12-4 2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	H23.12
COLUMN, STABILIZER, RPV 3012, HEIGHT: 49 FT; DIAMETER: 6 FT 6 IN A/N: <u>552914 567645</u>	D407				



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ACCUMULATOR, RPV 3013, STABILIZER OVERHEAD, HEIGHT: 23 FT 7 IN; DIAMETER: 4 FT A/N: <u>552914 567645</u>	D408			BENZENE: (10) [40CFR 61 Subpart FF, #2, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	H23.12
ABSORBER, RPV 3020, HEIGHT: 61 FT 9 IN; DIAMETER: 3 FT A/N: <u>552914 567645</u>	D411				
VESSEL, MDEA CONTACTOR, RPV 3026, HEIGHT: 37 FT; DIAMETER: 2 FT 6 IN A/N: <u>552914 567645</u>	D412				
KNOCK OUT POT, RPV 3022, HYDROGEN RELEASE MDEA, HEIGHT: 6 FT; DIAMETER: 2 FT A/N: <u>552914 567645</u>	D413				
REACTOR, RPV 3027, NO.4, HEIGHT: 14 FT 9 IN; DIAMETER: 5 FT 6 IN A/N: <u>552914 567645</u>	D414				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: <u>552914 567645</u>	D2485			HAP: (10) [40CFR 63 Subpart CC, #5A, 6- 23-2003]	H23.3, <u>H23.36</u>
EJECTOR, STEAM, RW0047-154.1, SERVING FLASH DRUM RPV 3007 A/N: <u>552914 567645</u>	D2648				E193.4
<u>VESSEL, PRODUCT COALESCER, RW 7182 289.02, LENGTH: 6 FT 6.5 IN; DIAMETER: 2 FT 10.25 IN</u> <u>A/N 567645</u>	<u>DX6</u>				
<u>POT, STABILIZER REBOILER, RPV 3011</u> <u>A/N 567645</u>	<u>DX7</u>				
PROCESS 5		SYSTEM 5			
HYDROTREATING		NAPHTHA HDS UNIT			
		System Conditions: <u>S11.X1</u>, S13.2, <u>S31.X1</u>, S46.1, S46.2, S46.4, S56.1			



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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
TOWER, STRIPPER, RW 5809, DIA: 3 FT 6 IN/6 FT 6 IN, HEIGHT: 54 FT 5 IN A/N: 552910 567646	D1420				
COLUMN, CONTACTOR, RW 5810, RELEASE HYDROGEN MDEA, HEIGHT: 50 FT 11 IN; DIAMETER: 3 FT A/N: 552910 567646	D1421				
REACTOR, RW 5832, HEIGHT: 21 FT 1 IN; DIAMETER: 7 FT A/N: 552910 567646	D1422				
KNOCK OUT POT, RW 5833, MAKE-UP HYDROGEN, HEIGHT: 7 FT 6 IN; DIAMETER: 2 FT A/N: 552910 567646	D1423				
ACCUMULATOR, RW 5836, STRIPPER OVERHEAD, HEIGHT: 13 FT 9 IN; DIAMETER: 4 FT 3 IN A/N: 552910 567646	D1424			BENZENE: (10) [40CFR 61 Subpart FF, #2, 12-4-2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4-2003]	H23.12
POT, CONDENSATE, RW 5834, STRIPPER REBOILER, HEIGHT: 3 FT; DIAMETER: 1 FT 6 IN A/N: 552910 567646	D1425				
TANK, FLASH, RW 5838, HEIGHT: 29 FT; DIAMETER: 7 FT A/N: 552910 567646	D1426				
TANK, SURGE, RW 5839, FEED, HEIGHT: 42 FT; DIAMETER: 10 FT A/N: 552910 567646	D1427				



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The operator shall comply with the terms and conditions set forth below:

KNOCK OUT POT, NATURAL GAS FILTER, RW 5837, HEIGHT: 5 FT; DIAMETER: 2 FT A/N: 552910 567646	D1432				
TOWER, DEBUTANIZER, C2 DEPENTANIZER, RPV 941, HEIGHT: 127 FT 8 IN; DIAMETER: 9 FT A/N: 552971 567646	<u>D637</u>				<u>L341.X1</u>
DRUM, MIXED BUTANE FEED, SURGE, DEPENTANIZER BOTTOMS, RPV 955, HEIGHT: 36 FT ; DIAMETER: 11 FT A/N: 552971 567646	<u>D658</u>				<u>L341.X1</u>
ACCUMULATOR, DEPENTANIZER, OVERHEAD, RPV 942, DEBUTANIZER HEIGHT: 31 FT 6 IN; DIAMETER: 9 FT A/N: 552971 567646	<u>D656</u>				<u>L341.X1</u>
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 552910 567646	D2488			HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]	H23.3, <u>H23.36</u>
PROCESS 8		SYSTEM 2			
HYDROCRACKING		HYDROCRACKER UNIT(FRACTIONATION SECTION)			
System Conditions: <u>S11.X1</u>, S13.2, S15.6, S31.9, S56.1					
Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
COLUMN, STRIPPER, RPV 3600, HEAVY HYDROCRACKATE, HEIGHT: 60 FT 6 IN; DIAMETER: 6 FT A/N: 552885 578249	D607				
COLUMN, FRACTIONATOR, RPV 3601, HEIGHT: 136 FT; DIAMETER: 13 FT A/N: 552885 578249	D608				



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The operator shall comply with the terms and conditions set forth below:

COLUMN, DEBUTANIZER TOWER, RPV 3603, HEIGHT: 91 FT; DIAMETER: 6 FT A/N: 552885 578249	D610				
COLUMN, TREATER, RPV 3604, LIQUID AMINE, HEIGHT: 27 FT; DIAMETER: 7 FT A/N: 552885 578249	D611				
SCRUBBER, RPV 3605, HEIGHT: 52 FT; DIAMETER: 3 FT A/N: 552885 578249	D612				
SCRUBBER, RPV 3606, AMINE, HEIGHT: 66 FT 6 IN; DIAMETER: 3 FT A/N: 552885 578249	D613				
ACCUMULATOR, RPV 3610, DEBUTANIZER OVERHEAD, LENGTH: 22 FT; DIAMETER: 6 FT A/N: 552885 578249	D614				
ACCUMULATOR, RPV 3611, FRACTIONATOR OVERHEAD, LENGTH: 21 FT; DIAMETER: 7 FT A/N: 552885 578249	D615				
ACCUMULATOR, RPV 3612, FRACTIONATOR HOT REFLUX, LENGTH: 32 FT; DIAMETER: 8 FT A/N: 552885 578249	D616				
SETTLING TANK, RPV 3614, AMINE, LENGTH: 24 FT; DIAMETER: 6 FT 6 IN A/N: 552885 578249	D617				
KNOCK OUT POT, RPV 3617, OVERHEAD GAS, HEIGHT: 10 FT 6 IN; DIAMETER: 3 FT A/N: 552885 578249	D619				



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COMPRESSOR, RW 22 087.32, NO. 3, FRACTIONATOR OVERHEAD GAS, UNIT L-83247 A/N: 552885 578249	D622				
COMPRESSOR, RW 23 087.32, NO. 2, FRACTIONATOR OVERHEAD GAS, UNIT L-83248 A/N: 552885 578249	D623				
COMPRESSOR, RW 24 087.32 NO. 1, FRACTIONATOR OVERHEAD GAS, UNIT L-83249 A/N: 552885 578249	D624				
TOWER, STRIPPER, RPV 6233, DISTILLATE HYDROCRACKATE, HEIGHT: 52 FT 9 IN; DIAMETER: 7 FT A/N: 552885 578249	D2070				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 552885 578249	D2495			HAP: (10) [40CFR 63 Subpart CC, #5A, 6-20-2013]	H23.3, H23.36
PROCESS 9		SYSTEM 1			
ALKYLATION AND POLYMERIZATION		C4 ALKYLATION UNIT			
		System Conditions: S11.X1 , S13.2, S15.31, S31.1, S31.X1 , S46.1 , S46.4 , S56.1			
Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
TANK, SETTLING, RPV-5299, ACID, HEIGHT: 70 FT; DIAMETER: 15 FT A/N: 553177 567647	D1479				
TANK, SETTLING, RPV-5300, ACID, HEIGHT: 70 FT; DIAMETER: 15 FT A/N: 553177 567647	D1480				
TANK, SETTLING, RPV-5301, ACID, HEIGHT: 70 FT; DIAMETER: 15 FT A/N: 553177 567647	D1481				



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DRUM, SUCTION TRAP/FLASH, RPV 5303, HEIGHT: 56 FT; DIAMETER: 16 FT A/N: 553177 567647	D1482				
ACCUMULATOR, RPV-5313, REFRIGERANT, HEIGHT: 16 FT 6 IN; DIAMETER: 5 FT 6 IN A/N: 553177 567647	D1483				
VESSEL, COALESCER, RPV-5290, FEED, HEIGHT: 4 FT 4 IN; DIAMETER: 4 FT 6 IN A/N: 553177 567647	D1485				
TANK, WASH, RPV-5316, ACID, HEIGHT: 53 FT; DIAMETER: 16 FT A/N: 553177 567647	D1486				
TANK, WASH, RPV-5317, ALKALINE WATER, LENGTH: 45 FT; DIAMETER: 15 FT A/N: 553177 567647	D1487				
VESSEL, ECONOMIZER, RPV 5310, HEIGHT: 30 FT; DIAMETER: 10 FT A/N: 553177 567647	D1488				
ACCUMULATOR, RPV-5325, DEISOBUTANIZER OVERHEAD, LENGTH: 42 FT; DIAMETER: 14 FT A/N: 553177 567647	D1489				
TANK, WASH, RPV-5314, ALKY, DEPROPANIZER CAUSTIC, LENGTH: 10 FT; DIAMETER: 2 FT A/N: 553177 567647	D1490				
VESSEL, COALESCER, RPV-5315, DEPROPANIZER FEED, LENGTH: 10 FT; DIAMETER: 2 FT A/N: 553177 567647	D1491				
DRUM, K.O., RPV-7135, ACID, HEIGHT: 3 FT 6 IN; DIAMETER: 2 FT A/N: 553177 567647	D1492				



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STORAGE TANK, FIXED ROOF, RPV-5380, FRESH ACID, LENGTH: 50 FT; DIAMETER: 13 FT A/N: 553177 567647	D1493				
STORAGE TANK, FIXED ROOF, RPV-5381, FRESH ACID, LENGTH: 50 FT; DIAMETER: 13 FT A/N: 553177 567647	D1494				
TOWER, DEISOBUTANIZER, RPV 5318, HEIGHT: 162 FT 6 IN; DIAMETER: 12 FT 6 IN A/N: 553177 567647	D1495				
REACTOR, CONTACTOR STRATCO, RPV 5291, WITH A 500 H.P. AGITATOR A/N: 553177 567647	D1496				
REACTOR, CONTACTOR STRATCO, RPV 5292, WITH A 500 H.P. AGITATOR A/N: 553177 567647	D1497				
REACTOR, CONTACTOR STRATCO, RPV 5293, WITH A 500 H.P. AGITATOR A/N: 553177 567647	D1498				
REACTOR, CONTACTOR STRATCO, RPV 5294, WITH A 500 H.P. AGITATOR A/N: 553177 567647	D1499				
REACTOR, CONTACTOR STRATCO, RPV 5295, WITH A 500 H.P. AGITATOR A/N: 553177 567647	D1500				
REACTOR, CONTACTOR STRATCO, RPV 5296, WITH A 500 H.P. AGITATOR A/N: 553177 567647	D1501				



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COMPRESSOR, RW 47 087.05, REFRIGERATION (EFFLUENT), CENTRIFUGAL MULTI-STAGE A/N: 553177 567647	D1502				
VESSEL, COALESCER, MEROX SAND FILTER, RPV 5285, HEIGHT: 17 FT 6 IN; DIAMETER: 9 FT 6 IN A/N: 553177 567647	D1520				
TOWER, RW 5965, C5 SIDESTRIPPER FOR DEBUTANIZER, HEIGHT: 32 FT; DIAMETER: 4 FT A/N: 553177 567647	D1522				
TOWER, ALKY DEPROPANIZER, RPV 842, HEIGHT: 76 FT; DIAMETER: 4 FT 6 IN A/N: 553177 567647	D631				
TOWER, ALKY DEBUTANIZER, RPV-843, NO. 1A, HEIGHT: 109 FT 6 IN; DIAMETER: 8 FT A/N: 553177 567647	D632				<u>L341.X1</u>
<u>VESSEL, COALESCER, RW 7184- 289.02, AMYLENE FEED, HEIGHT: 6 FT 6.5 IN; DIAMETER: 2 FT 8 IN</u> A/N: 567647	<u>DX8</u>				<u>L341.X1</u>
COLUMN, DEISOBUTANIZER, RPV 875, NO.1B, HEIGHT: 120 FT; DIAMETER: 5 FT A/N: 553177 567647	D634				
TANK, SURGE, RPV 0211, NAPHTHA, HEIGHT: 8 FT; DIAMETER: 3 FT 5 IN A/N: 553177 567647	D635				
TOWER, COKER DEPROP, RPV 951, HEIGHT: 75 FT 8 IN; DIAMETER: 4 FT A/N: 553177 567647	D638				



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TANK, SURGE, RPV 830, OLEFIN FEED, HEIGHT: 33 FT; DIAMETER: 10 FT A/N: 553177 567647	D639				
TANK, SURGE, RPV 831, OLEFIN FEED, HEIGHT: 33 FT; DIAMETER: 10 FT A/N: 553177 567647	D640				
TANK, SURGE, RPV 832, OLEFIN FEED, HEIGHT: 33 FT; DIAMETER: 10 FT A/N: 553177 567647	D641				
TANK, EMERGENCY ALKYLATION, RPV 834, HEIGHT: 36 FT; DIAMETER: 8 FT A/N: 553177 567647	D642				
TANK, EMERGENCY ALKYLATION , RPV 835, HEIGHT: 36 FT 6 IN; DIAMETER: 8 FT A/N: 553177 567647	D643				
TANK, EMERGENCY ALKYLATION , RPV 836, HEIGHT: 32 FT; DIAMETER: 8 FT A/N: 553177 567647	D644				
TANK, EMERGENCY ALKYLATION , RPV 837, HEIGHT: 32 FT; DIAMETER: 8 FT A/N: 553177 567647	D645				
ACCUMULATOR, RPV 847, NO. 1A, ALKYLATION DEBUT OVERHEAD, LENGTH: 20 FT; DIAMETER: 5 FT A/N: 553177 567647	D646				
DRUM, SPENT CAUSTIC DEGASSING , RPV 859, LENGTH: 20 FT; DIAMETER: 5 FT A/N: 553177 567647	D647				



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SECTION H: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

DRUM, DEGASSING, RPV 0884, PROCESS WASTE WATER, HEIGHT: 20 FT 6 IN; DIAMETER: 4 FT 11 IN A/N: 553177 567647	D648				
DRUM, ACID BLOWDOWN NEUTRALIZING, RPV 972, HEIGHT: 10 FT; DIAMETER: 8 FT A/N: 553177 567647	D649				
TANK, SURGE, RPV 890, ISOBUTANE FEED, HEIGHT: 40 FT; DIAMETER: 12 FT 11 IN A/N: 553177 567647	D650				
DRUM, ACID RELIEF BLOWDOWN, RPV 892, LENGTH: 40 FT; DIAMETER: 13 FT A/N: 553177 567647	D651				
DRUM, DEGASSING, RPV-985, MEROX WATER WASH TOWER WATER, LENGTH: 13 FT 6 IN; DIAMETER: 8 FT A/N: 553177 567647	D652				
DRUM, RPV-966, SPENT ACID, LENGTH: 39 FT 6 IN; DIAMETER: 13 FT A/N: 553177 567647	D659				
DRUM, RPV-967, SPENT ACID, LENGTH: 39 FT 6 IN; DIAMETER: 13 FT A/N: 553177 567647	D660				
STORAGE TANK, RPV-969, NO.2 ALKYLATION ACID, LENGTH: 45 FT; DIAMETER: 12 FT A/N: 553177 567647	D661				
STORAGE TANK, RPV-970, NO. A- 371, NO.2 ALKYLATION ACID, LENGTH: 45 FT; DIAMETER: 12 FT A/N: 553177 567647	D662				



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SECTION H: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

DRUM, BLOWDOWN, RPV 971, MTBE/MEROX HYDROCARBON, HEIGHT: 10 FT; DIAMETER: 8 FT A/N: 553177 567647	D663				
TOWER, BUTANE MEROX EXTRACTOR, RPV 5360, HEIGHT: 72 FT 6 IN; DIAMETER: 6 FT 6 IN A/N: 553177 567647	D1530				E204.7
TOWER, OXIDIZER, RPV 994, MEROX SOLUTION, HEIGHT: 30 FT; DIAMETER: 3 FT A/N: 553177 567647	D665				
POT, RPV 5385, MEROX CATALYST ADDITION, HEIGHT: 4 FT; DIAMETER: 1 FT A/N: 553177 567647	D666				
DRUM, BLOWDOWN, RPV 891, ACID, LENGTH: 40 FT; DIAMETER: 13 FT A/N: 553177 567647	D667				
DRUM, BLOWDOWN, RPV 989, ALKY HYDROCARBON, HEIGHT: 16 FT 9 IN; DIAMETER: 8 FT 1 IN A/N: 553177 567647	D668				
POT, MEROX FOUL AIR DRIP, RPV 6940, HEIGHT: 7 FT 4 IN; DIAMETER: 2 FT A/N: 553177 567647	D2948				
ACCUMULATOR, RPV 5494, NO. 1, ALKYLATION DEBUT OVERHEAD, LENGTH: 12 FT; DIAMETER: 4 FT A/N: 553177 567647	D670				
DRUM, RPV 5302, ATMOSPHERIC FLASH, HEIGHT: 11 FT 8 IN; DIAMETER: 6 FT 6 IN A/N: 553177 567647	D1527				



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SECTION H: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

KNOCK OUT POT, RPV 5339, DEPROPANIZER OVERHEAD, HEIGHT: 4 FT; DIAMETER: 2 FT A/N: 553177 567647	D1528				
TANK, SURGE, RPV 5350, #314 , COKER DEPROPANIZER FEED, HEIGHT: 30 FT; DIAMETER: 8 FT A/N: 553177 567647	D1529				
KNOCK OUT POT, RPV 5377, COKER DEPROPANIZER, HEIGHT: 11 FT 8 IN; DIAMETER: 6 FT 6 IN A/N: 553177 567647	D1531				
TOWER, RPV 5551, WATER KNOCKOUT DRUM, HEIGHT: 17 FT 9 IN; DIAMETER: 6 FT A/N: 553177 567647	D1532				
KNOCK OUT POT, RW 6929, C4/OLEFIN FEED WATER (TK 311), HEIGHT: 4 FT; DIAMETER: 2 FT A/N: 553177 567647	D2949				
KNOCK OUT POT, RW 6930, C4/OLEFIN FEED WATER (TK 312), HEIGHT: 4 FT; DIAMETER: 2 FT A/N: 553177 567647	D2950				
KNOCK OUT POT, RW 6932, C4/OLEFIN FEED WATER (TK 313), HEIGHT: 4 FT; DIAMETER: 2 FT A/N: 553177 567647	D2951				
KNOCK OUT POT, RPV 5612, IC4/OLEFIN FEED WATER(TK330), HEIGHT: 4 FT; DIAMETER: 1 FT A/N: 553177 567647	D1536				
KNOCK OUT POT, RPV 5614, DEPROPANIZER FEED WATER(TK314), HEIGHT: 3 FT; DIAMETER: 1 FT A/N: 553177 567647	D1538				



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The operator shall comply with the terms and conditions set forth below:

VESSEL, SEPARATOR, RPV 5336, HYDROCARBON/CONDENSATE, HEIGHT: 6 FT 8 IN; DIAMETER: 7 FT 6 IN A/N: 553177 567647	D2019				
ACCUMULATOR, RPV 856, SOLVENT RERUN TOWER OVERHEAD, LENGTH: 20 FT; DIAMETER: 5 FT A/N: 553177 567647	D2044				
REACTOR, CONTACTOR STRATCO 4A, RW 6366, WITH A 500 H.P. AGITATOR A/N: 553177 567647	D2146				
REACTOR, CONTACTOR STRATCO 4B, RW 6367, WITH A 500 H.P. AGITATOR A/N: 553177 567647	D2147				
TANK, SETTLING, RW-6368, ACID, HEIGHT: 70 FT; DIAMETER: 15 FT A/N: 553177 567647	D2148				
TOWER, RPV-5351, MEROX WATER WASH, HEIGHT: 74 FT; DIAMETER: 7 FT A/N: 553177 567647	D1517				
TOWER, MEROX EXTRACTOR, RPV-5284, HEIGHT: 33 FT; DIAMETER: 7 FT A/N: 553177 567647	D1521				
DRUM, WASH NAPHTHA SETTLER, RW 0059, HEIGHT: 10 FT; DIAMETER: 7 FT A/N: 553177 567647	D2369				
VESSEL, COALESCER, RW 6430, MIXED C4 FEED, HEIGHT: 4 FT 4 IN; DIAMETER: 2 FT 8 IN A/N: 553177 567647	D2370				



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The operator shall comply with the terms and conditions set forth below:

DRUM, CAUSTIC PREWASH, RW 6424, HEIGHT: 20 FT; DIAMETER: 11 FT A/N: 553177 567647	D2371				
VESSEL, DISULFIDE SEPARATOR, RW 6425, LENGTH: 24 FT; DIAMETER: 6 FT 6 IN A/N: 553177 567647	D2372	C910 C2413		HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]	
FILTER, DISULFIDE SAND, RW-6426, HEIGHT: 7 FT; DIAMETER: 2 FT A/N: 553177 567647	D2373				
ACCUMULATOR, RPV-0852, DEPROPANIZER OVERHEAD, HEIGHT: 20 FT; DIAMETER: 5 FT A/N: 553177 567647	D2889				
VESSEL, RPV-5382, ACID RELIEF BLOWDOWN NEUTRALIZING, HEIGHT: 10 FT; DIAMETER: 8 FT A/N: 553177 567647	D2890				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 553177 567647	D2496			HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]	H23.3, <u>H23.36</u>
VESSEL, COALESCER, RW 6889-289.02, NET EFFLUENT/WATER WASH, LENGTH: 13 FT 6 IN; DIAMETER: 6 FT A/N: 553177 567647	D2664				
MIXER, RW 6642-289.02, STATIC, NET EFFLUENT/ACID, DIAMETER: 8 IN A/N: 553177 567647	D2665				
MIXER, RW 6641-289.02, STATIC, NET EFFLUENT/ALKALINE WATER, DIAMETER: 8 IN A/N: 553177 567647	D2666				



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The operator shall comply with the terms and conditions set forth below:

MIXER, RW 6640-289.02, STATIC, NET EFFLUENT/WASH WATER, DIAMETER: 8 IN A/N: 553177 567647	D2667				
PROCESS 9		SYSTEM 9			
ALKYLATION AND POLYMERIZATION		ISO-OCTENE UNIT			
		System Conditions: <u>S11.X1</u> , S13.2, S31.4, S46.1 , S46.4 , S56.1			
Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
ACCUMULATOR, RPV-942, DEBUTANIZER OVERHEAD, HEIGHT: 31 FT 6 IN; DIAMETER: 9 FT A/N: 552971	D656				
ACCUMULATOR, RPV 952, DEPROPANIZER OVERHEAD, LENGTH: 11 FT 6 IN; DIAMETER: 5 FT A/N: 552971 575838	D657				
VESSEL, VAPORIZER, RPV 3232, NO.2 ALKYLATION AMMONIA, HEIGHT: 5 FT 4 IN; DIAMETER: 4 FT A/N: 552971 575838	D664				
KNOCK OUT POT, VAPOR RECOVERY, RPV-912, HEIGHT: 7 FT; DIAMETER: 5 FT A/N: 552971 575838	D1508				
REACTOR, DIMERIZATION, RPV 5355, HEIGHT: 29 FT; DIAMETER: 12 FT A/N: 552971 575838	D2719				E336.8
KNOCK OUT POT, RPV 5613, MIXED OLEFIN FEED WATER (TK316) A/N: 552971 575838	D1537				



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The operator shall comply with the terms and conditions set forth below:

TOWER, DEBUTANIZER, C2 (RPV 941), HEIGHT: 127 FT 8 IN; DIAMETER: 9 FT A/N: 552971	D637				
DRUM, RPV 955, MIXED BUTANE FEED, HEIGHT: 36 FT ; DIAMETER: 11 FT A/N: 552971	D658				
DRUM, V-X1, ALCOHOL RECYCLE, HEIGHT: 12 FT; DIAMETER: 3 FT 6 IN A/N: 552971 575838	D2720				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 552971 575838	D2503			HAP: (10) [40CFR 63 Subpart CC, #5A, 6-20-2013]	H23.3
PROCESS 14		SYSTEM 11			
LOADING AND UNLOADING		LPG RAIL CAR LOADING/UNLOADING RACK			
		System Conditions: S11.X1, S31.X1, S46.2, S46.3, S46.4, S56.1			
Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
LOADING AND UNLOADING ARM, RAIL CAR, EIGHT (8), PROPYLENE/PROPANE/BUTANE, WITH TWO FLEXIBLE HOSES & ONE TWO INCH REPRESSURIZING HOSE TO VRS, DIAMETER: 2 IN A/N: 552883 567648	D2131				
DRUM, SURGE, LPG UNLOADING, RW 7185-289.02, HEIGHT: 26 FT; DIAMETER: 8 FT 6 IN A/N 567648	DX9				L341.X1
DRUM, KNOCKOUT, LPG UNLOADING, RW 7186-289.02, HEIGHT: 8 FT; DIAMETER: 3 FT 6 IN A/N 567648	DX10				L341.X1



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SECTION H: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS
The operator shall comply with the terms and conditions set forth below:

FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 552883 567648	D2539				H23.3, H23.36
PROCESS 19		SYSTEM 9			
PETROLEUM MISCELLANEOUS		REFINERY INTERCONNECTION			
		System Conditions: S11.X1, S31.X2, S56.1			
Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
<u>FUGITIVE EMISSIONS, MISCELLANEOUS, REFINERY INTERCONNECTION PIPING, METERING SYSTEM, AND MISCELLANEOUS FUGITIVE COMPONENTS</u> A/N: 575837	<u>DX11</u>			<u>HAP: (10) [40CFR 63 Subpart CC, #5A, 6-20-2013]</u>	<u>H23.36, L341.X1</u>
PROCESS 21		SYSTEM 1			
AIR POLLUTION CONTROL PROCESS		SOUTH AREA FLARE SYSTEM			
		System Conditions: S11.X1, S31.10, S58.2			
Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
FLARE, ELEVATED WITH STEAM INJECTION, NATURAL GAS, WITH 3 PILOT ASSEMBLIES, TIE-IN LINE TO FCCU FLARE FROM THE SOUTH UNITS, HEIGHT: 203 FT 6 IN; DIAMETER: 3 FT WITH A/N: 571394 575841 BURNER, JOHN ZINK, MODEL STF-S-24	C1302	D809 D815		CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	<u>B61.8,</u> D12.15, D323.1, E193.3, H23.29, H23.39
KNOCK OUT POT, RPV-0417, HEIGHT: 7 FT; DIAMETER: 5 FT A/N: 571394 575841	D2795				
KNOCK OUT POT, FLARE STACK, HEIGHT: 21 FT 6 IN; DIAMETER: 9 FT A/N: 571394 575841	D1303				



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SECTION H: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

KNOCK OUT POT, RPV-303, SOUTH AREA FLARE PRIMARY, LENGTH: 40 FT; DIAMETER: 10 FT A/N: 571394 575841	D1304				
DRUM, WATER SEAL, RW 6989, LENGTH: 25 FT; DIAMETER: 13 FT A/N: 571394 575841	D2796				
KNOCK OUT POT, SOUTH FLARE LINE, RPV-1994, HEIGHT: 5 FT 9 IN; DIAMETER: 1 FT 4 IN A/N: 571394 575841	D2809				
KNOCK OUT POT, NORTH FLARE LINE, RPV-1993, HEIGHT: 5 FT 9 IN; DIAMETER: 1 FT 4 IN A/N: 571394 575841	D2810				
VESSEL, AUTOPUMP, SOUTH AREA FLARE, RW-6876-289.09, HEIGHT: 3 FT 11 IN; DIAMETER: 1 FT A/N: 571394 575841	D2863				
VESSEL, AUTOPUMP, SOUTH AREA FLARE, RW-6877-289.09, HEIGHT: 3 FT 11 IN; DIAMETER: 1 FT A/N: 571394 575841	D2864				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 571394 575841	D2542			HAP: (10) [40CFR 63 Subpart CC, #5A, 6-20-2013]	H23.3
PROCESS 21		SYSTEM 3			
AIR POLLUTION CONTROL PROCESS		HYDROCRACKER FLARE SYSTEM			
		System Conditions: <u>S11.X1</u> , S31.10, S58.4			
Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions



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The operator shall comply with the terms and conditions set forth below:

FLARE, ELEVATED WITH STEAM INJECTION, WITH A LIGHT GAS SEAL & 33 STEAM JETS, NATURAL GAS, SERVING AS BACKUP FOR THE UNITS HANDLED BY THE FCCU FLARE, HEIGHT: 161 FT 3 IN; DIAMETER: 2 FT 6 IN WITH A/N: 553114 575840 BURNER, JOHN ZINK, MODEL STF-S-30	C1308			CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B61.8, D12.15, D323.1, E193.3, E193.25, H23.12, H23.29, <u>H23.39</u>
DRUM, FLARE KNOCKOUT, RPV 3212, LENGTH: 12 FT; DIAMETER: 10 FT A/N: 553114 575840	D1309			BENZENE: (10) [40CFR 61 Subpart FF, #2, 12-4- 2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12-4- 2003]	H23.12
DRUM, WATER SEAL, RW 7002, LENGTH: 40 FT; DIAMETER: 14 FT A/N: 553114 575840	D2804				
VESSEL, AUTOPUMP, HCU FLARE, RW-6878-289.09, HEIGHT: 3 FT 11 IN; DIAMETER: 1 FT A/N: 553114 575840	D2867				
VESSEL, AUTOPUMP, HCU FLARE, RW-6879-289.09, HEIGHT: 3 FT 11 IN; DIAMETER: 1 FT A/N: 553114 575840	D2868				
MIST ELIMINATOR, RPV-3214, LENGTH: 28 FT 6 IN; DIAMETER: 12 FT A/N: 553114 575840	D1310				
VESSEL, SEPARATOR, RPV 3213, STEAM, HEIGHT: 4 FT; DIAMETER: 2 FT A/N: 553114 575840	D1311				



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The operator shall comply with the terms and conditions set forth below:

DRUM, RPV 3215, OIL ELIMINATOR, HEIGHT: 6 FT; DIAMETER: 5 FT A/N: 553114 575840	D1312				
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 553114 575840	D2544			HAP: (10) [40CFR 63 Subpart CC, #5A, 6-20-2013]	H23.3
PROCESS 21		SYSTEM 6			
AIR POLLUTION CONTROL PROCESS		REFINERY FLARE NO.5 SYSTEM			
System Conditions: S11.X1 , S31.10, S58.6					
FLARE, ELEVATED WITH STEAM INJECTION, NO.5 , WITH 3 PILOT ASSEMBLIES, FLAME FRONT GENERATOR & FLAME MONITOR, NATURAL GAS, WATER SEAL, MOLECULAR SEAL, REMOTE SMOKE DETECTOR & STEAM INJECTION CONTRL SYS, HEIGHT: 265 FT; DIAMETER: 3 FT 6 IN A/N: 553120 575839 <u>BURNER, FLAREGAS, MODEL 42” FHP</u>	C1661			CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B61.4, B61.8 , D12.15, D90.16, D323.1, E193.3, H23.1, H23.12, H23.29, H23.39
KNOCK OUT POT, NO.5 FLARE, RW 6135, HEIGHT: 30 FT; DIAMETER: 12 FT A/N: 553120 575839	D1662			BENZENE: (10) [40CFR 61 Subpart FF, #2, 12 4- 2003]; VOC: 500 PPMV (8) [40CFR 61 Subpart FF, 12 4- 2003]	H23.12
DRUM, WATER SEAL, RW 7025, LENGTH: 50 FT; DIAMETER: 14 FT A/N: 553120 575839	D2806				
VESSEL, AUTOPUMP, NO. 5 FLARE, RW-6881-289.09, HEIGHT: 3 FT 11 IN; DIAMETER: 1 FT A/N: 553120 575839	D2871				
VESSEL, AUTOPUMP, NO. 5 FLARE, RW-6882-289.09, HEIGHT: 3 FT 11 IN; DIAMETER: 1 FT A/N: 553120 575839	D2872				



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SECTION H: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

FUGITIVE EMISSIONS, MISCELLANEOUS	D2547			HAP: (10) [40CFR 63 Subpart CC, #5A, 6-23-2003]	H23.3
A/N: 553120 575839					

S11.X1 The operator shall comply with all applicable mitigation measures stipulated in the "Statement of Findings, Statement of Overriding Considerations, and Mitigation Monitoring Plan" document which is part of the AQMD Certified Final Environmental Impact Report dated "DATE TBD" for this facility.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with the applicable measures stipulated in the "Statement of Findings, Statement of Overriding Considerations, and Mitigation Monitoring Plan" document.

This condition shall only apply to equipment listed in Section H of this facility permit.

[CA PRC CEQA, 11-23-1970]

[Systems subject to this condition: Process 1, System 5, 8; Process 5, System 2, 4, 5; Process 8, System 2; Process 9, System 1, 9; Process 14, System 11; Process 21, System 1, 3, 6]

S13.2 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1123

[RULE 1123, 12-7-1990]

[Systems subject to this condition: Process 1, System 5, 6; Process 5, System 2, 4, 5; Process 8, System 2; Process 9, System 1, 9]

S15.6 The vent gases from all affected devices of this process/system shall be vented as follows:

All sour gases shall be directed to amine contactor system located within this system.

This process/system shall not be operated unless the amine contactor system is in full use and has a valid permit to receive vent gases from this system.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]



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The operator shall comply with the terms and conditions set forth below:

[Systems subject to this condition: Process 5, System 2, 4; Process 8, System 2]

S15.31 The vent gases from all affected devices of this process/system shall be vented as follows:

All waste gases generated from this system shall be directed to a thermal oxidizer or fuel gas combustion device which is in full use, has a valid permit to receive vent gases from this system, and complies with all applicable rules and regulations including 40CFR60, Subpart J limits and monitoring requirements.

All waste gas generated from this system shall be considered as fuel gas as defined in 40CFR60, Subpart J. Therefore, the vent gases are, when directed to a thermal oxidizer or fuel gas combustion device, subject to the H₂S limits of Subpart J.

[40CFR 60 Subpart J, 6-24-2008]

[Systems subject to this condition: Process 9, System 1]

S31.X1 The following BACT requirements shall apply to VOC service fugitive components associated with the devices that are covered by application number(s) 567643, 567645, 567646, 567647, 567648, 578248:

All new valves in VOC service shall be bellows seal valves except: (1) those specifically exempted by Rule 1173; (2) those in heavy liquid service as defined in Rule 1173; or (3) those approved by the District in the following applications: control valves, instrument piping/tubing, applications requiring torsional valve stem motion, applications where valve failure could pose safety hazard (e.g., drain valves with valve stems in horizontal position), retrofits/special applications with space limitations, and valves not commercially available.

All new components in VOC service as defined by Rule 1173, except those specifically exempted by Rule 1173, shall be distinctly identified from other components through their tag numbers (e.g., numbers ending in the letter "N5"), and shall be noted in the records.

All new open-ended lines shall be equipped with cap, blind flange, plug, or a second valve.

All new pressure relief valves shall be connected to closed vent system or equipped with a rupture disc.

All new pumps shall utilize double seals and be connected to a closed vent system.



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The operator shall comply with the terms and conditions set forth below:

All new compressors shall be equipped with a seal system with a higher pressure barrier fluid.

All new process drains shall be equipped with water seal, or a closed vent system and control device complying with the requirements of 40CFR60 Subpart QQQ Section 60.692-5.

All new valves and flanges in VOC service as defined by Rule 1173, except those specifically exempted by the rule, shall be inspected monthly using EPA Method 21.

If 98.0 percent or greater of the new non-bellows seal valves and the new flanges population inspected (as an aggregate) is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppmv for two consecutive months, then the operator may change leak inspection interval for these components from monthly to quarterly with prior approval of the Executive Officer. The operator shall revert back to monthly inspection interval if less than 98.0 percent of these components is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppmv.

The operator shall keep records of the monthly inspection, subsequent repair, and re-inspection, in a manner approved by the District. Records shall be kept and maintained for at least five years, and shall be made available to the Executive Officer upon request.

For all new components in VOC service as defined by Rule 1173, a leak greater than 500 ppm but less than 1,000 ppm, measured as methane above background using EPA Method 21, shall be repaired within 14 days of detection. A leak greater than 1,000 ppm shall be repaired according to Rule 1173.

The operator shall provide to the District, prior to initial startup, a list of all non-leakless type valves that were installed. The list shall include the tag numbers for the valves and reasons why leakless valves were not used. The operator shall also submit a complete as-built piping and instrumentation diagram(s) and copies of requisition data sheets or field inspection surveys for all non-leakless type valves.

The operator shall provide to the District, no later than 90 days after initial startup, a recalculation of the fugitive emissions based on actual components installed and removed from service.



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The operator shall comply with the terms and conditions set forth below:

[Systems subject to this condition: Process 1, System 5; Process 5, System 2, 4, 5; Process 9, System 1; Process 14, System 11]

S31.X2 The following BACT requirements shall apply to VOC service fugitive components associated with the devices that are covered by application number(s) 575837:

All new valves in VOC service shall be bellows seal valves except: (1) those specifically exempted by Rule 1173; (2) those in heavy liquid service as defined in Rule 1173; or (3) those approved by the District in the following applications: control valves, instrument piping/tubing, applications requiring torsional valve stem motion, applications where valve failure could pose safety hazard (e.g., drain valves with valve stems in horizontal position), retrofits/special applications with space limitations, and valves not commercially available.

All new components in VOC service as defined by Rule 1173, except those specifically exempted by Rule 1173, shall be distinctly identified from other components through their tag numbers (e.g., numbers ending in the letter "N2"), and shall be noted in the records.

All new open-ended lines shall be equipped with cap, blind flange, plug, or a second valve.

All new pressure relief valves shall be connected to closed vent system or equipped with a rupture disc.

All new pumps shall utilize double seals and be connected to a closed vent system.

All new compressors shall be equipped with a seal system with a higher pressure barrier fluid.

All new process drains shall be equipped with water seal, or a closed vent system and control device complying with the requirements of 40CFR60 Subpart QQQ Section 60.692-5.

All new valves and flanges in VOC service as defined by Rule 1173, except those specifically exempted by the rule, shall be inspected monthly using EPA Method 21.

If 98.0 percent or greater of the new non-bellows seal valves and the new flanges population inspected (as an aggregate) is found to leak gaseous or liquid volatile organic compounds at a rate less than 200 ppmv for two consecutive months, then the



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The operator shall comply with the terms and conditions set forth below:

operator may change leak inspection interval for these components from monthly to quarterly with prior approval of the Executive Officer. The operator shall revert back to monthly inspection interval if less than 98.0 percent of these components is found to leak gaseous or liquid volatile organic compounds at a rate less than 200 ppmv.

The operator shall keep records of the monthly inspection, subsequent repair, and re-inspection, in a manner approved by the District. Records shall be kept and maintained for at least five years, and shall be made available to the Executive Officer upon request.

For all new components in VOC service as defined by Rule 1173, a leak greater than 200 ppm but less than 1,000 ppm, measured as methane above background using EPA Method 21, shall be repaired within 14 days of detection. A leak greater than 1,000 ppm shall be repaired according to Rule 1173.

The operator shall provide to the District, prior to initial startup, a list of all non-leakless type valves that were installed. The list shall include the tag numbers for the valves and reasons why leakless valves were not used. The operator shall also submit a complete as-built piping and instrumentation diagram(s) and copies of requisition data sheets or field inspection surveys for all non-leakless type valves.

The operator shall provide to the District, no later than 90 days after initial startup, a recalculation of the fugitive emissions based on actual components installed and removed from service.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Systems subject to this condition: Process 19, System 9]

S31.4 The following BACT requirements shall apply to VOC service fugitive components associated with the devices that are covered by application number(s) 427414, 376189:

For the purpose of this condition, leakless valve shall be defined as any valve equipped with sealed bellow or equivalent as approved in writing by the District prior to installation. Components shall be defined as any valve, flange, fitting, pump, compressor, pressure relief device, diaphragm, hatch, sight-glass, and meter, which are not exempted by Rule 1173.

The operator shall keep records of the monthly inspection (and quarterly where applicable), subsequent repair, and re-inspection, in a manner approved by the District.



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The operator shall comply with the terms and conditions set forth below:

All process drains shall be equipped with water seal, or a closed vent system and control device complying with the requirements of 40CFR60 Subpart QQQ Section 60.692-5.

All components in VOC service, except valves and flanges shall be inspected quarterly using EPA reference method 21. All valves and flanges in VOC service except those specifically exempted by Rule 1173 shall be inspected monthly using EPA Method 21.

If 98.0 percent or greater of the new valve and the new flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppm for two consecutive months, then the operator may revert to a quarterly inspection program with the approval of the executive officer. This condition does not apply to leakless valves.

All valves in VOC service shall be of leakless type, except those specifically exempted by Rule 1173 or approved by the District in the following applications: heavy liquid service, control valves, instrument piping/tubing, applications requiring torsional valve stem motion, applications where failures could pose safety hazards (e.g. drain valves with valve stems in horizontal position), retrofits with space limitations, and valves not commercially available.

The operator shall provide to the District, no later than 90 days after initial startup, a recalculation of the fugitive emissions based on actual components installed and removed from service. The operator shall also submit a complete, as built, piping and instrumentation diagram(s) and copies of requisition data sheets for all non-leakless type valves with a listing of tag numbers and reasons why leakless valves were not used.

All open-ended valves shall be equipped with cap, blind flange, plug, or a second valve.

All pressure relief valves shall be connected to closed vent system or equipped with rupture disc.

All sampling connections shall be closed-purge, closed-loop, or closed-vent system.

All components in VOC service, a leak greater than 500 ppm but less than 1,000 ppm measured as methane above background as measured using EPA Method 21, shall be repaired within 14 days of detection. A leak greater than 1,000 ppm shall be repaired according to Rule 1173.

All components are subject to 40CFR60, Subpart GGG

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]



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The operator shall comply with the terms and conditions set forth below:

[Systems subject to this condition: Process 9, System 9]

S31.5 The following BACT requirements shall apply to VOC service fugitive components associated with the devices that are covered by application number(s) 425810:

For the purpose of this condition, leakless valve shall be defined as any valve equipped with sealed bellow or equivalent as approved in writing by the District prior to installation. Components shall be defined as any valve, flange, fitting, pump, compressor, pressure relief device, diaphragm, hatch, sight-glass, and meter, which are not exempted by Rule 1173.

The operator shall keep records of the monthly inspection (and quarterly where applicable), subsequent repair, and re-inspection, in a manner approved by the District.

All components in VOC service, except valves and flanges, shall be inspected quarterly using EPA reference method 21. All valves and flanges in VOC service, except those specifically exempted by Rule 1173, shall be inspected monthly using EPA Method 21.

If 98.0 percent or greater of the new valve and the new flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppm for two consecutive months, then the operator may revert to a quarterly inspection program with the approval of the executive officer. This condition does not apply to leakless valves.

All valves in VOC service shall be of leakless type, except those specifically exempted by Rule 1173 or approved by the District in the following applications: heavy liquid service, control valves, instrument piping/tubing, applications requiring torsional valve stem motion, applications where failures could pose safety hazards (e.g. drain valves with valve stems in horizontal position), retrofits with space limitations, and valves not commercially available.

All open-ended valves shall be equipped with cap, blind flange, plug, or a second valve.

All pressure relief valves shall be connected to closed vent system or equipped with rupture disc.

All sampling connections shall be closed-purge, closed-loop, or closed-vent system.

All components in VOC service, a leak greater than 500 ppm but less than 1,000 ppm measured as methane above background as measured using EPA Method 21, shall be



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repaired within 14 days of detection. A leak greater than 1,000 ppm shall be repaired according to Rule 1173.

All components are subject to 40CFR60, Subpart GGG

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Systems subject to this condition: Process 1, System 5]

S31.9 The following BACT requirements shall apply to VOC service fugitive components associated with the devices that are covered by application number(s) 450816, 450822, 450823, 450824, 450840, 450841, 502189, 502190:

All open-ended valves shall be equipped with cap, blind flange, plug, or a second valve

All pressure relief valves shall be connected to closed vent system or equipped with rupture disc

All new process drains installed as a result of this project shall be equipped with a water seal

All sampling connections shall be closed-purge, closed-loop, or closed-vent system

All new valves in VOC service installed as a result of this project shall be of leakless type, except those specifically exempted by Rule 1173 or approved by the District in the following applications: heavy liquid service, control valves, instrument piping/tubing, applications requiring torsional valve stem motion, applications where failures could pose safety hazards (e.g. drain valves with valve stems in horizontal position), retrofits with space limitations, and valves not commercially available

For the purpose of this condition, leakless valve shall be defined as any valve equipped with sealed bellow or equivalent as approved in writing by the District prior to installation. Components shall be defined as any valve, flange, fitting, pump, compressor, pressure relief device, diaphragm, hatch, sight-glass, and meter, which are not exempted by Rule 1173

All accessible pumps, compressors, and atmospheric PRDs shall be audio-visually inspected once per 8 hr shift. All accessible components in light liquid/gas/vapor and pumps in heavy liquid service shall be inspected quarterly, except for pumps in light liquid service and valves in gas/vapor or light liquid service which shall be inspected monthly



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The operator shall comply with the terms and conditions set forth below:

when required per CFR60 Subpart GGG. All inaccessible or difficult to monitor components in light liquid/gas/vapor service shall be inspected annually

The following leaks shall be repaired within 7 calendar days - All light liquid/gas/vapor components leaking at a rate of 500 to 10,000 ppm, heavy liquid components leaking at rate of 100 to 500 ppm or greater than 3 drops/minute, unless otherwise extended as allowed under Rule 1173. The following leaks shall be repaired within 2 calendar days - any leak between 10,000 to 25,000 ppm, any atmospheric PRD leaking at a rate of 200 to 25,000 ppm, unless otherwise extended as allowed under Rule 1173

The following leaks shall be repaired within 1 calendar day - any leak greater than 25,000 ppm, heavy liquid leak greater than 500 ppm, or light liquid leak greater than 3 drops per minute

If 98.0 percent or greater of the new valve and the new flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppm for two consecutive months, the operator may revert to a quarterly inspection program with the approval of the executive officer. This condition does not apply to leakless valves

The operator shall keep records of the monthly inspection (and quarterly where applicable), subsequent repair, and re-inspection, in a manner approved by the District

The operator shall provide to the District, no later than 90 days after initial startup, a recalculation of the fugitive emissions based on actual components installed and removed from service. The operator shall also submit a complete, as built, piping and instrumentation diagram(s) and copies of requisition data sheets for all non-leakless type valves with a listing of tag numbers and reasons why leakless valves were not used

[**RULE 1303(a)(1)-BACT, 5-10-1996**; RULE 1303(a)(1)-BACT, 12-6-2002; **RULE 1303(b)(2)-Offset, 5-10-1996**; RULE 1303(b)(2)-Offset, 12-6-2002]

[Systems subject to this condition: Process 8, System 2]

S31.10 The following BACT requirements shall apply to VOC service fugitive components associated with the devices that are covered by application number(s) 454566, 454568, 458594, 458600, 459257 & 459286:

The operator shall provide to the District, no later than 90 days after initial startup, a recalculation of the fugitive emissions based on actual components installed and removed from service. The valves and flanges shall be categorized by size and service. The operator shall submit a listing of all new non-bellows seal valves which shall be categorized by tag



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The operator shall comply with the terms and conditions set forth below:

no., size, type, operating temperature, operating pressure, body material, application, and reasons why bellows seal valves were not used.

All new valves in VOC service, except those specifically exempted by Rule 1173 and those in heavy liquid service as defined in Rule 1173, shall be bellows seal valves, except as approved by the District, in the following applications: heavy liquid service, control valve, instrument piping/tubing, applications requiring torsional valve stem motion, applications where valve failure could pose safety hazard (e.g., drain valves with valve stems in horizontal position), retrofits/special applications with space limitations, and valves not commercially available.

All new valves and major components in VOC service as defined by Rule 1173, except those specifically exempted by Rule 1173 and those in heavy liquid service as defined in Rule 1173, shall be distinctly identified from other components through their tag numbers (e.g., numbers ending in the letter "N"), and shall be noted in the records.

All new components in VOC service as defined in Rule 1173, except valves and flanges, shall be inspected quarterly using EPA reference Method 21. All new valves and flanges in VOC service, except those specifically exempted by Rule 1173, shall be inspected monthly using EPA Method 21.

If 98.0 percent or greater of the new (non-bellows seal) valves and the new flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppmv for two consecutive months, then the operator may change to a quarterly inspection program with the approval of the District.

The operator shall revert from quarterly to monthly inspection program if less than 98.0 percent of the new (non-bellows seal) valves and the new flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppmv.

All new components in VOC service with a leak greater than 500 ppmv but less than 1,000 ppmv, as methane, measured above background using EPA Method 21 shall be repaired within 14 days of detection. Components shall be defined as any valve, fitting, pump, compressor, pressure relief valve, diaphragm, hatch, sight-glass, and meter, which are not exempted by Rule 1173.

The operator shall keep records of the monthly inspection (quarterly where applicable), subsequent repair, and re-inspection, in a manner approved by the District. Records shall be kept and maintained for at least five years, and shall be made available to the Executive Officer or his authorized representative upon request.



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The operator shall comply with the terms and conditions set forth below:

All open-ended valves shall be equipped with cap, blind flange, plug, or a second valve.

All pressure relief valves shall be connected to a closed vent system or equipped with a rupture disc and telltale indicator.

All pumps shall utilize double seals and be connected to a closed vent system.

All compressors to have a seal system with a higher pressure barrier fluid.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Systems subject to this condition: Process 21, System 1, 3, 6]

S46.1 The following conditions shall apply to VOC service fugitive components in this system:

For the purpose of this condition, leakless valve shall be defined as any valve equipped with sealed bellow or equivalent as approved in writing by the District prior to installation. Components shall be defined as any valve, flange, fitting, pump, compressor, pressure relief device, diaphragm, hatch, sight-glass, and meter, which are not exempted by Rule 1173.

For the purpose of this condition, existing component shall be defined as any component that was installed under a permit to construct/operate that was issued prior to June 1, 1993. New component shall be defined as any component that was installed or modified under a permit to construct that was issued between June 1, 1993 and December 27, 2001.

All new valves in VOC service shall be of leakless type, except those specifically exempted by Rule 1173 or approved by the District in the following applications: heavy liquid service, control valves, instrument piping/tubing, applications requiring torsional valve stem motion, applications where failures could pose safety hazards (e.g. drain valves with valve stems in horizontal position), retrofits with space limitations, and valves not commercially available.

All new valves and new major components, as defined in Rule 1173, shall be physically identified in the field with special marking that distinguishes the components from existing. Additionally all new components shall be distinctly identified from existing components through their tag numbers (e.g. numbers ending in the letter "N"), and shall be noted in the records.

All new components in VOC service with a leak greater than 500 ppm but less than 1,000 ppm, as methane, measured above background using EPA Method 21, shall be repaired



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The operator shall comply with the terms and conditions set forth below:

within 14 days of detection. A leak greater than 1,000 ppm shall be repaired according to Rule 1173.

All new pressure relief valves shall be connected to closed vent system or equipped with rupture disc.

All new sampling connections shall be closed-purge, closed-loop, or closed-vent system.

All components are subject to 40CFR60, Subpart GGG.

**[RULE 1173, 5-13-1994; RULE 1173, 2-6-2009; RULE 1303(a)(1)-BACT, 5-10-1996;
RULE 1303(b)(2)-Offset, 5-10-1996; 40CFR 60 Subpart GGG, 6-2-2008]**

[Systems subject to this condition: ~~Process 5, System 5; Process 9, System 1, 9~~]

S46.2 The following conditions shall apply to VOC service fugitive components in this system:

For the purpose of this condition, leakless valve shall be defined as any valve equipped with sealed bellow or equivalent as approved in writing by the District prior to installation. Components shall be defined as any valve, flange, fitting, pump, compressor, pressure relief device, diaphragm, hatch, sight-glass, and meter, which are not exempted by Rule 1173.

For the purpose of this condition, existing component shall be defined as any component that was installed under a permit to construct/operate that was issued prior to June 1, 1993. New component shall be defined as any component that was installed or modified under a permit to construct that was issued between June 1, 1993 and December 27, 2001.

The operator shall provide to the District, no later than August 29, 2003, a complete, as built, process instrumentation diagram(s) with a listing showing by functional grouping, location, type, accessibility, and application of each new valve in VOC service. The operator shall provide copies of requisition data sheets for all non-leakless type valves with a listing of tag numbers and reasons why leakless valves were not used.

The operator shall provide to the District, no later than August 29, 2003, a list of the following components broken down into the categories contained in District Form E-18A entitled "Fugitive Component Count": existing components, new components proposed to be installed under applicable permit(s) to construct, and new components that were actually installed under applicable permit(s) to construct.



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The operator shall comply with the terms and conditions set forth below:

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996**]

[Systems subject to this condition: ~~Process 5, System 5; Process 14, System 11~~]

S46.3 The following conditions shall apply to VOC service fugitive components in this system:

For the purpose of this condition, leakless valve shall be defined as any valve equipped with sealed bellow or equivalent as approved in writing by the District prior to installation. Components shall be defined as any valve, flange, fitting, pump, compressor, pressure relief device, diaphragm, hatch, sight-glass, and meter, which are not exempted by Rule 1173.

For the purpose of this condition, existing component shall be defined as any component that was installed under a permit to construct/operate that was issued prior to June 1, 1993. New component shall be defined as any component that was installed or modified under a permit to construct that was issued between June 1, 1993 and December 27, 2001.

All new valves in VOC service shall be of leakless type, except those specifically exempted by Rule 1173 or approved by the District in the following applications: heavy liquid service, control valves, instrument piping/tubing, applications requiring torsional valve stem motion, applications where failures could pose safety hazards (e.g. drain valves with valve stems in horizontal position), retrofits with space limitations, and valves not commercially available.

All new valves and new major components, as defined in Rule 1173, shall be physically identified in the field with special marking that distinguishes the components from existing. Additionally all new components shall be distinctly identified from existing components through their tag numbers (e.g. numbers ending in the letter "N"), and shall be noted in the records.

All new components in VOC service with a leak greater than 500 ppm but less than 1,000 ppm, as methane, measured above background using EPA Method 21, shall be repaired within 14 days of detection. A leak greater than 1,000 ppm shall be repaired according to Rule 1173.

All new pressure relief valves shall be connected to closed vent system or equipped with rupture disc.

All new sampling connections shall be closed-purge, closed-loop, or closed-vent system.



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The operator shall comply with the terms and conditions set forth below:

[RULE 1173, 5-13-1994; RULE 1173, 2-6-2009; RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Systems subject to this condition: ~~Process 14, System 11~~]

S46.4 The following conditions shall apply to VOC service fugitive components in this system:

For the purpose of this condition, leakless valve shall be defined as any valve equipped with sealed bellow or equivalent as approved in writing by the District prior to installation. Components shall be defined as any valve, flange, fitting, pump, compressor, pressure relief device, diaphragm, hatch, sight-glass, and meter, which are not exempted by Rule 1173.

For the purpose of this condition, existing component shall be defined as any component that was installed under a permit to construct/operate that was issued prior to June 1, 1993. New component shall be defined as any component that was installed or modified under a permit to construct that was issued on or after June 1, 1993.

All new valves in VOC service shall be of leakless type, except those specifically exempted by Rule 1173 or approved by the District in the following application: heavy liquid service, control valves, instrument piping/tubing, applications requiring torsional valve stem motion, applications where failures could pose safety hazards (e.g. drain valves with valve stem in horizontal position), retrofits with space limitations, and valves not commercially available.

All new valves and new major components, as defined in Rule 1173, shall be physically identified in the field with special marking that distinguishes the components from existing. Additionally all new components shall be distinctly identified from existing components through their tag numbers (e.g. number ending in the letter "N"), and shall be noted in the records.

All new components in VOC service with a leak greater than 500 ppm but less than 1,000 ppm, as methane, measured above background using EPA Method 21, shall be repaired within 14 days of detection. A leak greater than 1,000 ppm shall be repaired according to Rule 1173.

All new pressure relief valves shall be connected to closed vent system or equipped with rupture disc.

All new sampling connections shall be closed-purge, closed-loop, or closed-vent system.



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The operator shall comply with the terms and conditions set forth below:

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996**]

[Systems subject to this condition: Process 1, System 6; **Process 5, System 5; Process 9, System 1, 9; Process 14, System 11**]

S56.1 Vent gases from all affected devices of this process/system shall be directed to a gas recovery system, except for the venting of gases from equipment specifically identified in a permit condition, and for the following events for which vent gases may be directed to a flare:

- 1) Vent gases during an Emergency as defined in Rule 1118;
- 2) Vent gases resulting from Planned Shutdowns, Startups and/or Turnarounds as defined in Rule 1118, provided that the owner/operator follows the applicable options and any associated limitations to reduce flaring that were identified, evaluated and most recently submitted by the owner/operator to the Executive Officer pursuant to Rule 1118, or any other option(s) which reduces flaring for such events; and
- 3) Vent gases due to and resulting from an Essential Operating Need, as defined in Rule 1118.

The evaluation of options to reduce flaring during Planned Shutdowns, Startups and/or Turnarounds shall be updated annually to reflect any revisions, and submitted to the Executive Officer in the first quarter of each year, but no later than March 31st of that year.

This process/system shall not be operated unless its designated flare(s) are in full use and have valid permits to receive vent gases from this process/system.

Vent gases shall not be released to the atmosphere except from the existing safety devices or relief valves on the following equipment:

Process 1, System 2: 10, 12, 14
Process 1, System 3: 19, 20, 24 to 26
Process 1, System 5: 35, 39, 41, 42, 2726
Process 1, System 6: 43, 49, 57, 58
Process 1, System 7: 59, 60, 61, 62
Process 2, System 1: 74, 77, 2388
Process 2, System 2: 82, 89, 90, 92, 2389
Process 2, System 3: 94, 95
Process 2, System 5: 98, 101, 102
Process 2, System 6: 111, 112, 113
Process 2, System 11: 159, 160



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The operator shall comply with the terms and conditions set forth below:

Process 3, System 1: 164 to 167, 170, 172 to 181, 184, 1336 to 1349, 2382, 2387
Process 3, System 2: 186, 188, 189, 191, 196, 199, 201, 204, 1352 to 1355
Process 3, System 4: 241
Process 3, System 6: 242, 245 to 247, 249
Process 3, System 7: 1363
Process 4, System 1: 253 to 256, 258, 262, 265, 268, 270, 272, 277, 278, 282, 283.
287, 1364, 1366, 1367, 1372, 1374 to 1376, 1378 to 1381
Process 4, System 2: 291, 1400 to 1403
Process 4, System 3: 292, 293, 297, 299
Process 4, System 4: 302, 304
Process 4, System 5: 308, 310, 311
Process 4, System 7: 1975 to 1977, 1980, 1981, 1986
Process 5, System 1: 314 to 317, 319, 320, 323 to 332
Process 5, System 2: 335 to 338, 340, 343, 348 to 353
Process 5, System 3: 356, 360, 1413
Process 5, System 4: 401, 406, 407, 412, 414
Process 6, System 1: 426, 427, 429, 431, 434, 435, 437, 440, 444, 445, 455 to 456,
458, 460
Process 6, System 2: 462, 469, 474 to 475, 477 to 481, 483, 486
Process 6, System 3: 490, 494, 495, 498, 501, 503, 506, 507, 509, 510, 512, 513, 518,
520, 521, 525 to 528
Process 7, System 1: 542 to 548, 550, 552 to 558, 560, 562 to 569
Process 7, System 2: 2892, 2893
Process 8, System 1: 583, 584, 593 to 597
Process 8, System 2: 608, 610, 612 to 614, 622, 624
Process 9, System 1: 631, 632, 638 to 652, 659 to 663, 666 to 668, 1482, 1483, 1486 to
1488, 1491, 1493 to 1495, 1497 to 1502, 1528, 1533 to 1536, 2019
Process 9, System 2: 672 to 681, 685
Process 9, System 9: ~~637~~, 653, ~~656~~, ~~658~~, 664
Process 10, System 1: 706
Process 10, System 2: 709, 711 to 715, 720, 721
Process 10, System 3: 725
Process 11, System 1: 730
Process 12, System 1: 756, 759
Process 12, System 2: 760 to 762, 764
Process 12, System 3: 765 to 770
Process 12, System 4: 771, 772, 774
Process 12, System 8: 785, 790, 2365, 2366
Process 12, System 9: 794, 797 to 799
Process 12, System 10: 806
Process 12, System 12: 815, 818



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The operator shall comply with the terms and conditions set forth below:

Process 12, System 13: 823, 826, 828
Process 12, System 16: 830
Process 12, System 22: 853, 854
Process 12, System 24: 860, 861, 863, 864, 865
Process 12, System 25: 866, 867, 869, 870, 871, 2003
Process 12, System 27: 873 to 875
Process 15, System 7: 1644 to 1646, 1648, 1649
Process 16, System 3: 2115 to 2120, 2353, 2394
Process 21, System 1: 1304
Process 21, System 2: 1307
Process 21, System 4: 1315, 1316, 1319, 1323 to 1325, 1659

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Systems subject to this condition: Process 1, System 5; Process 5, System 2, 4, 5; Process 8, System 2; Process 9, System 1, 9; Process 14, System 11, **Process 19, System 9**]

S58.2 South Area Flare System (Coker Flare) shall only be used to receive and handle vent gases from the following Process(es) and System(s):

Coking Units (Process: 2, System: 1 & 2)
Coker Blowdown Facility (Process: 2, System: 3)
Coker Gas Compression & Absorption Unit (Process: 2, System: 5)
Blowdown Gas Compression System (Process: 2, System: 6)
Coker Gas Treating/H₂S Absorption Unit (Process: 2, System: 11)
Fluid Catalytic Cracking Units (Process: 3, System: 1, 2 & 3)
Propylene Tetramer Unit (Process: 3, System: 6)
Superfractionation Unit (Process: 4, System: 1)
Naphtha Splitter Unit (Process: 4, System: 2)
Light Ends Depropanizer Unit (Process: 4, System: 3)
Straight Run Light Ends Depropanizer Unit (Process: 4, System: 4)
North Area De-isobutanizer Unit (Process: 4, System: 5)
Coker Gasoline Fractionation Unit (Process: 4, System: 7)
Liquid Recovery Unit (Process: 4, System: 8)
Light Gasoline Hydrogenation Unit (Process: 5, System: 4)
Catalytic Reformer Units (Process: 6, System: 1, 2, & 3)
Alkylation Unit (Process: 9, System: 1)
Iso-Octene Unit (Process: 9, System: 9)
MDEA Regeneration Units (Process: 12, System: 9, 10, 11, 12, & 13)
North & South Sour Water Treatment Systems (Process: 12, System: 14 & 15)
Sulfur Recovery Units (Process: 13, System: 1, 2, 3, & 4)



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The operator shall comply with the terms and conditions set forth below:

Claus Tail Gas Treating Units (Process: 13, System: 5 & 7)
Mixed Light Ends Tank Car Loading/Unloading (Process: 14, System: 2)
Refinery Interconnection System (Process 19, System 9)
Refinery Vapor Recovery System (Process: 21, System: 4)
Flare Gas Recovery System (Process: 21, System: 10)

The flare gas recovery system shall be operated in full use when any of the above Process(es) and System(s) is in operation. Full use means one of two compressor trains is online at any given time, except during planned startups or shutdowns when both compressors trains shall be online.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Systems subject to this condition: Process 21, System 1]

S58.4 Hydrocracker Flare System shall only be used to receive and handle vent gases from the following Process(es) and System(s):

Light Ends Depropanizer (Process: 4, System: 3)
Jet Fuel Hydrotreating Unit (Process: 5, System: 1)
Mid-Barrel Desulfurizer Unit (Process: 5, System: 2)
Light Gasoline Hydrogenation Unit (Process: 5, System: 4)
Catalytic Reformer Units (Process: 6, System: 1, 2, & 3)
Hydrogen Plant (Process: 7, System 1)
Hydrocracking Units (Process: 8, System: 1 & 2)
LPG Recovery System (Process: 10, System: 2)
Liquid Petroleum Gas Drying Facilities (Process: 10, System: 3)
MDEA Regeneration Systems (Process: 12, System: 9 & 10)
If HC Flare is being utilized to back up the FCCU Flare, FCCU, FCCU Gas Plant & FCCU Gas Compression Unit (Process: 3, System: 1, 2 & 3)
If HC Flare is being utilized to back up the FCCU Flare, Propylene Tetramer Unit (Process: 3, System: 6)
If HC Flare is being utilized to back up the FCCU Flare, Liquids Recovery Unit (Process: 4, System: 8)
If HC Flare is being utilized to back up the FCCU Flare, Catalytic Polymerization Unit (Process: 9, System: 2)
If HC Flare is being utilized to back up the FCCU Flare, Fuel Gas Mix System (Process: 10, System: 1)
If HC Flare is being utilized to back up the FCCU Flare, North Sour Water Treatment Unit (Process: 12, System: 14)



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The operator shall comply with the terms and conditions set forth below:

The flare gas recovery system shall be operated in full use when any of the above Process(es) and System(s) is in operation. Full use means one of two compressor trains is online at any given time, except during planned startups or shutdowns when both compressors trains shall be online.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Systems subject to this condition: Process 21, System 3]

S58.6 Refinery No. 5 Flare System shall only be used to receive and handle vent gases from the following Process(es) and System(s):

No. 1 Crude Unit (Process: 1, System 1)
Superfractionation Unit (Process: 4, System: 1)
Coker Gasoline Fractionation Unit (Process: 4, System: 7)
C3 Splitter Unit (Process: 4, System: 9)
Naphtha HDS Unit (Process: 5, System: 5)
Naphtha HDS Reactor Heater (Process: 5, System: 6)
Hydrogen Plant No. 2 (Process: 7, System: 2)
Alkylation Unit (Process 9, System 1)
C5 Alkylation Depentanizer Unit (Process: 9, System: 6)
C5 Alkylation Unit (Process: 9, System: 7)
Naphtha Isomerization Unit (Process: 9, System: 8)
Butane Isomerization Unit (Process: 9, System: 10)
UOP Merox Unit (Process: 12, System: 8)
LPG Tank Truck Loading/Unloading Rack (Process: 14, System: 10)
LPG Rail Car Loading/Unloading Rack (Process: 14, System: 11)
Flare Gas Recovery System (Process: 21, System: 10)
INEOS POLYPROPYLENE LLC ID 124808 (Process: 1, System: 1, 2, 3, 5, 6, & 9)

The flare gas recovery system shall be operated in full use when any of the above Process(es) and System(s) is in operation. Full use means one of two compressor trains is online at any given time, except during planned startups or shutdowns when both compressors trains shall be online.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Systems subject to this condition: Process 21, System 6]

A63.30 The operator shall limit emissions from this equipment as follows:



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The operator shall comply with the terms and conditions set forth below:

CONTAMINANT	EMISSIONS LIMIT
ROG	Less than or equal to 36 48.67 LBS PER DAY
CO	Less than or equal to 24 243.33 LBS PER DAY
PM	Less than or equal to 106 52.14 LBS PER DAY

[RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition: D63]

A99.X1 **The 2.62 Lbs/hr NOx emission limit(s) shall not apply when this equipment is operating during startup and shutdown modes.**

Each startup event shall not exceed 48 hours (not including refractory dry out period of up to 48 additional hours) and each shutdown event shall not exceed 24 hours.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition: D63]

A195.X1 **The 2.62 LBS/HR NOx emission limit(s) is averaged over 24 hours.**

[RULE 2005, 6-3-2011]

[Devices subject to this condition: D63]

B61.4 The operator shall not use fuel gas, except uncombined natural gas which is not regulated by the condition, containing the following specified compounds:

COMPOUND	ppm by volume
H2S greater than	160

[40CFR 60 Subpart J, 6-24-2008]

[Devices subject to this condition: ~~E1664~~]

B61.8 **The operator shall not use fuel gas containing the following specified compounds:**



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The operator shall comply with the terms and conditions set forth below:

COMPOUND	ppm by volume
<u>H2S greater than</u>	<u>162</u>

The 162 ppmv limit is averaged over three hours, excluding any vent gas resulting from an emergency malfunction, process upset or relief valve leakage

[40CFR 60 Subpart Ja, 6-24-2008]

[Devices subject to this condition: C1302, C1308, C1661]

C1.X1 The operator shall limit the heat input to no more than 360 MM Btu per hour.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition: D63]

D12.15 The operator shall install and maintain a(n) thermocouple to accurately indicate the presence of a flame at the pilot light.

The operator shall also install and maintain a device to continuously record the parameter being measured.

Thermocouple shall be the primary pilot flame detector. Infrared/ultraviolet detector may serve as back up detector when thermocouple is taken out of service for maintenance or repair.

[RULE 1118, 11-4-2005; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; 40CFR 60 Subpart A, 4-4-2014]

[Devices subject to this condition: C1302, C1308, C1661]

D29.3 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
ROG emissions	Approved District method	District-approved averaging time	Outlet
PM emissions	District method 5.1	1 hour	Outlet

The test(s) shall be conducted at least once every three years.



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The operator shall comply with the terms and conditions set forth below:

The test shall be conducted when the equipment is operating under normal conditions.

The test shall be conducted to demonstrate compliance with the emission limits specified in condition for this equipment.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: D63]

D29.X1 **The operator shall conduct source test(s) for the pollutant(s) identified below.**

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
ROG emissions	District Method 25.1 or 25.3	District-approved averaging time	Outlet of the SCR serving this equipment
CO emissions	District Method 100.1 or 10.1	District-approved averaging time	Outlet of the SCR serving this equipment
PM emissions	District Method 5.1, 5.2 or 5.3	District-approved averaging time	Outlet of the SCR serving this equipment
NOx emissions	District Method 100.1 or 10.1	District-approved averaging time	Outlet of the SCR serving this equipment

The test(s) shall be conducted within 90 days after achieving maximum production rate, but no later than 180 cumulative days of operation after the date of issuance of the Permit to Construct (A/N 567649) and at least annually thereafter.

The test shall be conducted when this equipment is operating at 80 percent or greater of the maximum design capacity.

The test shall be conducted to determine the oxygen concentration.

For NOx, source test data may be substituted with CEMS data from a RECLAIM certified CEMS.

The test shall be conducted to demonstrate compliance with the emission limits for this equipment including with emissions rates limits for PM, CO, and VOC, in units of lbs/MMscf.



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The operator shall comply with the terms and conditions set forth below:

The District shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted after District approval of a source test protocol submitted in accordance with Section E- Administrative Conditions.

The test shall be conducted and test report submitted to the District in accordance with Section E - Administrative Conditions.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 2005, 4-20-2001; RULE 407, 4-2-1982]

[Devices subject to this condition: D63]

D90.16 The operator shall periodically monitor the H₂S concentration at the inlet of this device according to the following specifications:

~~The Alternative Monitoring Plan (AMP) approved by the United States Environmental Protection Agency (USEPA) on March 27, 2008 for the periodic monitoring and reporting of H₂S concentration for refinery gas stream to No. 5 Flare~~

~~In addition, the operator shall also comply with all other requirements of the AMP issued by the USEPA on March 27, 2008 for No. 5 Flare~~

[40CFR 60 Subpart A, 6-13-2007; 40CFR 60 Subpart J, 6-24-2008]

[Devices subject to this condition: C1661]

D323.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a bi-weekly basis, at least, unless the equipment did not operate during the entire bi-weekly period. The routine bi-weekly inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:



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The operator shall comply with the terms and conditions set forth below:

1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or

2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions;
- 3). Date and time visible emission was abated; and
- 4). All visible emission observation records by operator or a certified smoke reader.

[**RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 401, 3-2-1984; RULE 401, 11-9-2001**]

[Devices subject to this condition: C1302, C1308, C1661]

D328.1 The operator shall determine compliance with the CO emission limit(s) either: (a) conducting a source test at least once every five years using AQMD Method 100.1 or 10.1; or (b) conducting a test at least annually using a portable analyzer and AQMD-approved test method. The test shall be conducted when the equipment is operating under normal conditions to demonstrate compliance with the CO emission limit(s). The operator shall comply with all general testing, reporting, and recordkeeping requirements in Sections E and K of this permit.

[**RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 407, 4-2-1982**]

[Devices subject to this condition: D63]

E193.3 The operator shall operate and maintain this equipment according to the following specifications:



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The operator shall comply with the terms and conditions set forth below:

The operator shall comply with all applicable requirements specified in Subpart A of the 40CFR60

[40CFR 60 Subpart A, 4-4-2014]

[Devices subject to this condition: C1302, C1308, C1661]

E193.4 The operator shall install this equipment according to the following specifications:

A blind flange shall be installed at the connection to this ejector from the flash drum at a location accessible for inspection.

This equipment shall be operated only during refinery turnaround in accordance with Rule 1123.

[RULE 1123, 12-7-1990]

[Devices subject to this condition: D2648]

E193.25 The operator shall restrict the operation of this equipment as follows:

The flare may serve to back up the FCCU Flare only when the FCCU Flare is taken out of service during the planned shutdown periods, and all of the following criteria are met:

The following units shall not be in operation: Hydrocracker Units (Process 8, System 1 & 2), Hydrogen Plant (Process 7, System 1).

When the HC Flare is serving as backup to the FCC Flare, only the following units shall relief to the flare:

Jet Fuel Hydrotreating Unit (Process 5, System 1), Mid-Barrel Desulfurizer Unit (Process 5, System 2), Light Gasoline Hydrogenation Unit (Process 5, System 4), LPG Recovery System (Process 10, System 2), LPG Drying Facilities (Process 10, System 3), Catalytic Reforming Units (Process 6, Systems 1, 2 & 3), MDEA Regeneration Systems No 1 & 2 (Process 12, Systems 9 & 10),

FCCU, FCCU Gas Plant & FCCU Gas Compression Unit (Process 3, Systems 1, 2 & 3), Propylene Tetramer Unit (Process 3, System 6), Liquid Recovery Unit (Process 4, System 8), Catalytic Polymerization Unit (Process 9, System 2), Fuel Gas Mix Drum



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The operator shall comply with the terms and conditions set forth below:

System (Process 10, System 1), North Sour Water Treatment Unit (Process 12, System 14).

For No. 9 Cooling Tower failure scenario, the relief loads shall not exceed the hydraulic capacity of the flare. If requested by District personnel, the operator shall provide analysis, or, if one is not available, perform hydraulic modeling analysis of the relief event to demonstrate compliance with this condition.

In No. 9 Cooling Tower failure scenario, only the following units shall relief to the flare: FCCU, FCCU Gas Plant & FCCU Gas Compression (Process 3, Systems 1, 2 & 3) and MDEA Regeneration Systems No. 1 & 2 (Process 12, System 9 & 10).

All other relief events to the flare shall not exceed the smokeless capacity of a flare, which is designed for 417,000 lb/hr, except for periods not to exceed a total of five minutes during any two consecutive hours. If requested by District personnel, the operator shall provide analysis, or, if one is not available, perform hydraulic modeling analysis of the relief event to demonstrate compliance with this condition.

The operator shall not utilize the HC Flare to back up the FCCU Flare for a period greater than 30 days, unless otherwise approved in writing by the Executive Officer.

The operator shall notify the District a minimum of 10 days before the start of the planned shutdown of the FCCU Flare. This notification shall indicate the estimated duration of the shutdown.

[RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition: C1308]

E204.7 The operator shall operate the valve to atmosphere according to the following specifications:

The valve shall be kept closed during normal operation and shall only be used for steaming out the tower during turnaround maintenance activities.

[RULE 1123, 12-7-1990]

[Devices subject to this condition: D1530]

E336.8 The operator shall vent the vent gases from this equipment as follows:



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The operator shall comply with the terms and conditions set forth below:

All emergency vent gases shall be directed to the South Area Flare System (Process 21, System 1).

This equipment shall not be operated unless the flare system is in full use and has a valid permit to receive vent gases from this equipment.

[RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition: ~~D2719~~]

H23.1 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
H2S	40CFR60, SUBPART	J

[40CFR 60 Subpart J, 9-12-2012]

[Devices subject to this condition: ~~C1661~~]

H23.3 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1173
VOC	40CFR60, SUBPART	GGG

[RULE 1173, 2-6-2009; 40 CFR 60 Subpart GGG, 6-2-2008]

[Devices subject to this condition: ~~D2462, D2483, D2485, D2488, D2495, D2496, D2503, D2542, D2544, D2547, D2539~~]

H23.12 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Benzene	40CFR61, SUBPART	FF

[40CFR 61 Subpart FF, 12-4-2003]

[Devices subject to this condition: D406, D408, D1424, ~~C1308, D1309, C1661, D1662~~]



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The operator shall comply with the terms and conditions set forth below:

H23.29 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
SOX	District Rule	1118
VOC	District Rule	1118

[RULE 1118, 11-4-2005]

[Devices subject to this condition: C1302, C1308, C1661]

H23.34 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	465
Sulfur Compounds	District Rule	465

[RULE 465, 8-13-1999]

[Devices subject to this condition: D2940, D2941, D2942, D2943]

H23.36 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1173
ROG	40CFR60, SUBPART	GGGa

[RULE 1173, 2-6-2009; 40CFR 60 Subpart GGGa, 6-2-2008]

[Devices subject to this condition: D2462, D2483, D2485, D2488, D2495, D2496, D2539, DX11]

H23.39 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
H2S	40CFR60, SUBPART	Ja

[40CFR 60 Subpart Ja, 6-24-2008]



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The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition: C1302, **C1308, C1661**]

K67.2 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Fuel heating value

Fuel rate

[**RULE 1303(b)(2)-Offset, 5-10-1996**]

[Devices subject to this condition: D63]

L341.X1 **Within 90 days after startup of this equipment the following devices shall be removed from operation:**

(D96) FCCU Regenerator at Tesoro LAR Wilmington Operations (Facility ID: 800436)

(D92) H-2 Steam Superheater at Tesoro LAR Wilmington Operations (Facility ID: 800436)

(D112) CO Boiler at Tesoro LAR Wilmington Operations (Facility ID: 800436)

(D89) H-3 Fresh Feed Heater at Tesoro LAR Wilmington Operations (Facility ID: 800436)

(D90) H-4 Hot Oil Loop Reboiler at Tesoro LAR Wilmington Operations (Facility ID: 800436)

(D91) H-5 Fresh Feed Heater at Tesoro LAR Wilmington Operations (Facility ID: 800436)

(D1664) B-1 Startup Heater at Tesoro LAR Wilmington Operations (Facility ID: 800436)

[**RULE 1313, 12-7-1995**]

[**Devices subject to this condition: DX1, DX2, DX8, DX9, DX10, DX11, D632, D637, D658, D656, D2726**]